Responsiveness in Psychotherapy

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Human interaction, including psychotherapy, is systematically responsive; therapists' and clients' behavior is influenced by emerging context, including perceptions of each other's characteristics and behavior. Feedback and mutual influence occur on a wide range of time scales, including treatment assignment, strategy, and tactics, and even within the delivery of interventions. Consequently, research that assumes linear relations among psychotherapeutic variables may not be trustworthy. The concept of responsiveness helps show how client characteristics, therapist characteristics, and process components may be important in psychotherapy despite a lack of linear relations to outcomes. Research strategies that incorporate responsiveness include the use of evaluative measures, systems approaches, and qualitative and narrative approaches.

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One reason for the gap between psychotherapy researchers and practitioners (e.g., Talley, Strupp, & Butler, 1994) is the frequent failure of research to confirm the importance of variables that are self-evidently important to practitioners. Variables that have failed to show consistent statistical links to positive outcomes include major classes of therapists' interventions, such as interpretations, self-disclosures, and focus on self-image; therapist characteristics, such as theoretical orientation, level of training, and years of experience; and client characteristics, such as gender, age, and ethnicity (Beutler, Machado, & Neufeldt, 1994; Garfield, 1994; Orlinsky, Grawe, & Parks, 1994; Shapiro et al., 1994; Stiles & Shapiro, 1994). We suggest that the concept of responsiveness helps make sense of this discrepancy.

We use the term *responsiveness* to describe behavior that is affected by emerging context, including emerging perceptions of others' characteristics and behavior. Insofar as therapist and client respond to each other, responsiveness implies a dynamic relationship between variables, involving bidirectional causation and feedback loops. In this review, we explore how responsiveness bears on understanding the results of psychotherapy research. Even though the phenomenon is familiar, we argue, researchers often overlook its implications. Taking responsiveness seriously may change the ways researchers conceptualize and investigate psychotherapy.

Human interaction is systematically responsive. For example, people normally answer each other's questions, stay on related topics, and take turns speaking using an elaborate system of signals (e.g., Elliott et al., 1994; Goodwin, 1981; Grice, 1975; Labov & Fanshel, 1977; Sacks, Schegloff, & Jefferson, 1974). In psychotherapy, responsiveness may include treatment selection and planning based on clients' problems and characteristics as well as the timing and phrasing of interventions based on clients' level of understanding and emotional state. Clinical guidelines such as, "If the client keeps saying the same thing after a reflection, you haven't got it," or "If the client becomes defensive, don't push an interpretation," describe responsiveness. Responsiveness is implicit in many commonly used clinical terms, such as accurate empathy, countertransference, and timing.

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In suggesting that psychotherapy is responsive, we mean that the content and process emerge as treatment proceeds, rather than being planned completely in advance. Thus, no two clients receive identical treatments, just as no two conversations are identical.

Responsiveness may be contrasted with *ballistic* action—action that is determined at its inception and carries through regardless of external events. Ballistic action is insensitive and nonresponsive, not incorporating emerging information. Put this way, no psychotherapy is ballistic. Nevertheless, psychotherapy research often incorporates implicit ballistic assumptions. For example, the assignment of clients to the same treatment condition in a clinical trial may be conceptualized ballistically, as if the clients were given identical treatments. Neither clinicians nor researchers would credit such a suggestion on close examination, but treatment conditions are often treated as unitary in conceptualizations of research results (e.g., "clients who received cognitive therapy improved significantly, as shown by . . .").

Insofar as participants' primary motives for entering psychotherapy are usually positive—the amelioration of distress and disorder—their responsive actions are usually intended to be positive or helpful. The term *responsiveness,* however, is technically neutral. In some other contexts, the intent of responsiveness could be hostile or destructive. For example, courtroom cross-examiners or, more extreme, political torturers might be responsive to many of the same variables as are psychotherapists but with a psychologically destructive intent.

Our primary interest, however, is in *appropriate responsiveness*—doing what is required to produce some desired outcome, such as reduction in symptoms or improvement in life functioning, or to meet some standard, such as acting consistently within some conceptual system (e.g., psychoanalytic or cognitive-behavioral theory). In addition to their normal social competence and human caring, psychotherapists' training and supervision promote appropriate responsiveness. The therapist's job is to monitor the situation and to choose a treatment that is appropriate for the client's problems, follow a strategy that is appropriate for the client's capacity, and intervene with techniques that are appropriate for the client's current state.

Appropriate responsiveness thus demands sensitivity to emerging client requirements. A therapist must, to some degree, recognize the client's deficits (e.g., needs, problems) and resources (e.g., ability to make use of) as they emerge and must intervene in ways that take them into account. Requirements may differ from clients' momentary wishes (e.g., Strupp, 1988). For example, a client's demands for active care may not signal a requirement to be nurtured if this would interfere with a goal of fostering the client's autonomy. Wolf (1990) told of a therapeutic turning point in which the therapist sharply told an adolescent client to get his dirty shoes off the couch. This exchange broke through the therapeutic stalemate, it was suggested, because it provided a corrective emotional experience for this particular client, who had been indulged by an overly permissive father.

Requirements and appropriate responsiveness must be judged in relation to each treatment's goals and standards. For example, therapist self-disclosure to a distant and alienated client or touching a client who is in emotional pain may be considered appropriate responsiveness within some orientations but technical errors within other orientations. The Plan Formulation Method (Weiss, Sampson, & Mount Zion Psychotherapy Research Group, 1986) suggests that psychotherapy clients hold frightening pathogenic beliefs, so a primary requirement is for disconfirmation of the beliefs as they become manifest within the therapeutic relationship. Appropriate responsiveness in this approach involves correctly recognizing "tests" posed by the client and responding in ways that disconfirm the beliefs.

Others have used the term *responsiveness* with varied meanings, some of which we do not intend. First, our use of responsiveness refers to a process (behavior affected by emerging context) and not to stable traits of individuals. Second, our use of responsiveness is not opposed to directiveness; one could use directive interventions responsively (cf. Greenberg, Rice, & Elliott, 1993). Third, though broadly consistent, our use of responsiveness is not meant to imply the specific meanings of such terms as maternal responsiveness (e.g., Richman, Miller, & LeVine, 1992), emotional responsiveness (e.g., Mullin & Linz, 1995), sexual responsiveness (e.g., Grossman, Cavanaugh, & Haywood, 1992), or treatment responsiveness (e.g., Pelham et al., 1993).

RESPONSIVENESS IS PERVASIVE

Responsiveness occurs on time scales that range from months to milliseconds, and we have grouped the examples of research roughly by their time scale following reviewers who have distinguished levels of process and

outcome analysis (Elliott, 1991; Greenberg, 1986; Russell, 1988). Interventions may respond simultaneously to events on multiple time scales, however. A particular therapist interpretation, for example, may respond simultaneously to the original presenting problems, an alliance rupture in the previous session, the preceding disclosure, and fleeting changes in the client's facial expression while the interpretation is in progress.

Responsiveness can be considered both in terms of variables *to* which participants respond and in terms of variables *with* which participants respond. *Responsiveness to* focuses on characteristics of the participants or the context, for example, the client's age, gender, ethnicity, socioeconomic status, diagnosis, or personality. *Responsiveness with* focuses on treatments, interventions, or other actions. A therapist responds *to* some client characteristic *with* some intervention.

Treatment Assignment

It is often assumed that clients are responsively assigned to appropriate treatments on the basis of their presenting problems or diagnoses, though the extent to which this is done is unclear (Howard et al., 1996). Researchers have attempted to identify background-level variable matches that influence treatment outcome, including personality, gender, and racial and ethnic characteristics (Beutler & Clarkin, 1990; Sue, Zane, & Young, 1994), and have offered recommendations for matches (e.g., Beutler & Clarkin, 1990; Murtagh & Greenwood, 1995). Formal and informal referral systems (including friends' recommendations and Yellow Page searches) may facilitate choices of therapist and treatment that are responsive to requirements.

Assigning clients to a treatment based on their *aptitude,* or ability to benefit from it, would represent appropriate responsiveness at the level of treatment choice. Demonstrations of differential benefits are called *aptitude-treatment interactions* (ATIs). For example, Longabaugh and his collaborators (Longabaugh, Beattie, Noel, Stout, & Malloy, 1993; Longabaugh, Wirtz, Beattie, Noel, & Stout, 1995) found that clients' success in abstaining from alcohol following relationship enhancement versus brief cognitive-behavior therapy for alcoholism depended differentially on the client's pretreatment social support and social investment. Most ATIs have involved narrowly defined treatment components rather than broad treatment approaches (Shoham, 1993; Shoham-Salomon & Hannah, 1991). For example, Foa (1992) described ATIs in which distinctive features of anxiety disorders (e.g., level of proneness to psychophysiological arousal) were matched with specific elements of the comparative treatments (e.g., muscle relaxation vs. muscle tension). Similarly, Shoham-Salomon, Avner, and Neeman (1989) showed that interventions based on paradoxical intentions were more effective for procrastinators who were high in psychological reactance than for those who were low in reactance. Jaffe et al. (1996) found that alcoholics with higher cognitive functioning responded relatively better to a relapse prevention strategy (which involved learning new information and skills), whereas those with lower cognitive functioning responded relatively better to a supportive therapy.

Sometimes, mental health delivery systems' responsiveness in assigning clients to treatments may be based on prejudicial stereotypes rather than client requirements. People who are of higher social class, well-educated, young, and white are more likely to be accepted into long-term, verbal treatments, whereas those who are of lower social class, less educated, older, or black are more likely not to receive treatment (or, formerly, to receive inpatient treatment; see Garfield, 1994, for a review). Matches based on diagnostic characteristics may also be inappropriate. For example, Meresman, Horowitz, and Bein (1995) argued that depressed patients who somaticize are differentially assigned to pharmacotherapy rather than psychotherapy but are subsequently more likely to drop out of treatment and to show less improvement than other patients, suggesting that this was not appropriately meeting their requirements.

Treatment Strategies

Case formulation represents a traditional way in which theories are applied responsively at the level of treatment strategy, after a client has been assigned to a therapist or treatment. Case formulations are amenable to research and can be made reliably within theoretical orientations (Eells, 1997; Persons, 1991; Weiss et al., 1986), though formulations of a particular case may differ across theoretical orientations (Messer, 1991; Persons, Curtis, & Silberschatz, 1991).

Therapists may respond to emerging indications of client requirements by changing their strategy and even their theoretical approach to the treatment. Most American psychotherapists consider themselves eclectic (Garfield &

Bergin, 1994; Garfield & Kurtz, 1976), and when one approach does not work, they can switch to another. This sort of strategic responsiveness was speculatively credited for the very high and equivalent effectiveness reported for the diverse approaches sampled in the 1995 *Consumer Reports* survey (Mental Health, 1995; Seligman, 1995).

Just as responsiveness does not imply indiscriminate compliance with client demands, however, it does not suggest that eclecticism is necessarily preferable to theoretical purity (Luborsky, McLellan, Woody, O'Brien, & Auerbach, 1985; Schulte, Kunzel, Pepping, & Schulte-Bahrenberg, 1992). Theoretically pure treatments may be adapted responsively to clients' varying requirements—by appropriate selection, timing, and adjustment of specific interventions. Changing of goals or strategy may signal a responsive process of resignation, in which participants conclude that the original goals could not be reached and so switch to less ambitious, more attainable ones (Schulte-Bahrenberg & Schulte, 1993).

Treatment Tactics

Treatment tactics—verbal techniques, selection of topics, scheduling of sessions, assignment of homework, and so forth—are used responsively to client and therapist characteristics, to events outside of therapy or in previous sessions, and to the immediately preceding events. For example, Hill et al. (1988) observed that therapists used different patterns of verbal response modes with patients from different diagnostic categories, suggesting that the therapists were responding to client variables such as degree of self-disclosure and anxiety level. As an example of tactical responsiveness to therapist background variables, Mann (1988) found male and female analysts reacted differently to patient attempts to devalue the therapy: Women tended to tolerate more devaluation, and focused more on the affective climate, whereas men maintained a more authoritative stance and focused more on cognitive aspects. Occurrences in preceding sessions, such as breaches in the therapeutic alliance, may have profound implications for tactics (Elliott, 1989; Safran, 1993). Appropriate responses to alliance breaches might include monitoring the therapist-client relationship, understanding both parties' contributions to it, and clarifying factors that obstruct it (Safran, 1993).

Therapeutic tactics are also responsive to the ongoing conversation within sessions (Elliott, 1989; Elliott et al., 1994). Hill et al. (1988), for example, found that when clients were at higher Experiencing levels, therapists used more interventions aimed at support and exploration of feelings and fewer aimed at giving information. The Experiencing scale is a measure of the client's therapeutic engagement, so higher ratings are considered more desirable (Klein, Mathieu-Coughlan, & Kiesler, 1986). In single-case studies of brief psychodynamic therapy, measures of therapist disconfirmation of pathogenic beliefs predicted ratings of client Experiencing in the succeeding few moments (Silberschatz & Curtis, 1993; Silberschatz, Fretter, & Curtis, 1986). These studies demonstrated a pattern of responsiveness at the level of tactics, suggesting that if clients displayed their pathogenic beliefs, and if therapists responded appropriately to disconfirm those beliefs, then clients' Experiencing was enhanced.

Dependencies that appear in time series analyses of therapy or other conversations presumably reflect participants' responsiveness to each other's (and their own) preceding behaviors (Russell & Trull, 1986). In a time series analysis of psychotherapy, Jones, Ghannam, Nigg, and Dyer (1993) found that patient dysphoric affect predicted later therapist acceptance and neutrality and interpretation of the patient's defensive maneuvers. Similarly, p-technique factor analyses of chained samples of client and therapist speech have shown clinically plausible statistical interdependencies of speech categories, indicating responsive processes (Czogalik & Russell, 1995; Stiles & Shapiro, 1995).

The choice and timing of therapeutic interventions must be understood in the context of normal conversational responsiveness. Following Grice's (1975) maxim, "be relevant," people in normal conversation are so highly responsive to each other that even small deviations from the normally responsive actions of staying on the same topic, taking turns speaking, not repeating unnecessarily, and so forth, may be first considered as revealing some ulterior motive ("Why did he say that?"). In therapy, even interventions that clients find surprising are normally meant to be appropriately responsive to emerging requirements, as understood within the therapist's conceptual system. A contrasting example of somewhat ballistic use of tactics might be that of novice therapists who blurt out phrases suggested by supervisors or treatment manuals, relatively oblivious to the client's current state.

Moment-to-Moment Responsiveness

Responsiveness occurs even as a single intended action unfolds. Microanalysis of human interaction shows that participants frequently adjust their communication in

light of ongoing feedback from the other. Goodwin (1981) observed that in an everyday dinner table conversation, speakers spontaneously modified the form and content of their speech in response to the nonverbal attending behaviors of listeners. The coordination took place on time scales a short as a few tens of milliseconds. For example, while listeners were shifting their gaze toward the speaker in order to begin attending, a process that usually took less than a second, speakers lengthened their articulation of a sound so that the beginning or end of the sound unit coordinated with acquiring the gaze of the new listener. Similarly, Elliott et al. (1994) showed that therapists made adjustments in wording in the course of advancing interpretations, in response to clients' reactions. For example, sometimes therapists appeared to pause before proceeding in order to provide support to the client when the client had trouble tolerating emotional pain associated with hearing an interpretation.

A microanalysis of therapeutic discourse in the case of a young anorexic student, Rhoda, illustrates responsiveness within interventions (Labov & Fanshel, 1977). The following passage occurred while Rhoda was complaining about her mother being away from home and leaving her with the housekeeping responsibilities. The therapist offered the interpretation that the mother's staying away was an overreaction to Rhoda's claims of independence in much the same way as Rhoda's refusal to eat was an overreaction to her family's suggestion that she ate too much.

Th: (breath) Well,
What they are really doing to you
Is similar to what (pause)

Apparently this goes on in the family—
To what you did with them around the dieting.

Rhoda: (silence)

Th: Y'know, when—
When they said you shouldn't be eating so much,
You stopped eating entirely.

Rhoda: Well,
When I said I could get along without my mother (inaudible)

Th: The other—
She—
She's making you get along entirely,
Without her—. (pause)

And—uh—
Mayb—
Y'know—

Maybe some of this has to be discussed together.

Actually it—uh—
Usually—. (pause)

Students,
Who go to college
Away from the home,
Don't attempt to keep house.
They either live in a dormitory
Where most things are done for them,

And they, y'know,
Eat together in a—uh—dining hall,

Or they live in a sorority house
Where some of the housekeeping is done for them,
And meals are served.

It isn't contemplated
That you would carry a whole house,
And go to school at the same time.

(Labov & Fanshel, 1977, p. 369, transcription conventions altered; stanza form after Gee, 1986)

Rhoda signaled her rejection of the interpretation by her silence and then by attempting to change the topic from her eating to her relationship with her mother. The therapist recognized that Rhoda had not accepted her interpretation and, after some verbal fumbling, responded to this resistance by mitigating the interpretation and by switching approaches—supporting Rhoda by, in effect, agreeing that she had been given too much responsibility. Labov and Fanshel (1977) interpreted this switch as an appropriately responsive attempt to mend a breach in the alliance.

Multidirectionality of Responsiveness

Mutual Responsiveness. Although our examples have focused on therapist responsiveness to client requirements, investigators have long noted that clients are responsive to therapists and vice versa (e.g., Rice, 1973; Schaffer, 1983). At the level of treatment assignment, therapy dyads may tend to reflect assortative matching, as clients actively seek therapists and treatments that meet their requirements. Hollander-Goldfein, Fosshage, and Bahr (1989) found that when clients interviewed several

therapists and then chose one, therapists tended to rate higher those clients who later selected them, suggesting that the process of selection was mutual, based on reciprocal perceptions and attraction. At the level of tactics, Jones et al.'s. (1993) bidirectional time series analysis of a single long-term psychotherapy with a depressed client showed that, for example, patient dysphoric affect both predicted and was predicted by therapist use of psychodynamic technique.

After reviewing factors influencing the conduct and efficacy in interpersonal psychotherapy of depression, Rounsaville et al. (1987) concluded, "all ratings of session quality and therapist competence appeared to be influenced by both patient factors and therapist factors" (p. 382). Even empathy, usually considered as residing in the therapist, may have bidirectional aspects, as patient style and pattern of response affect therapists' ability to empathize (Shapiro, 1976). Similarly, therapists' effectiveness may be facilitated by client Experiencing; clients attained higher postintervention Experiencing levels and rated therapist responses as more helpful when their preintervention Experiencing levels were higher (Hill et al., 1988). In the other direction, therapist self-disclosure was found to precede high levels of client Experiencing; paraphrase preceded moderate Experiencing; and direct guidance preceded the lowest levels of Experiencing (Hill et al., 1988).

Responsiveness to Own Requirements. People also respond to their own requirements by a variety of psychological homeostatic mechanisms. For example, according to the fever model of self-disclosure, as a person becomes more distressed, his or her focus of attention is more strongly drawn to subjective matters (i.e., psychological pain), and this is reflected in greater self-disclosure. Empirically, clients' self-disclosure was positively correlated with their levels of distress and depression (e.g., McDaniel, Stiles, & McGaughey, 1981), and participants' self-disclosure increased in response to experimentally manipulated anxiety (Stiles, Shuster, & Harrigan, 1992). Theoretically, such disclosure in turn provides catharsis, promotes self-understanding, and thereby tends to relieve the distress. That is, analogous to a fever, self-disclosure is both an indicator of disturbance and part of a restorative process (Stiles, 1995a).

IMPORTANT VARIABLES MAY NOT PREDICT OUTCOME

The concept of responsiveness permits a distinction between two meanings of *importance:* clinically valuable or salient versus statistically predictive of desirable outcomes. Saying that a client or therapist characteristic (e.g., gender, theoretical orientation) or a process component (e.g., interpretation, focus on negative self-image) is therapeutically important suggests that outcome depends on the therapist's attending to it or using it. But importance in this sense does not imply that clients who have that characteristic or receive more of that component should do better than those who do not or who receive less. We suggest that responsiveness is at least partly responsible for researchers' repeated failure to find consistent associations of psychotherapy outcome with seemingly important client, therapist, context, and process variables.

If therapists respond appropriately to varied client requirements, rather than emitting a process component randomly or ballistically (i.e., at some predetermined level), then the level (e.g., frequency, intensity) of that component will tend to be in the neighborhood of its optimum level in each client's treatment. To the extent that treatment is appropriately responsive—*with* a process component or *to* a client or therapist variable—outcome will tend to be constant insofar as it depends on that variable.

First, consider *responsiveness with:* If a client is getting the optimum amount of a process component, then increasing or decreasing the intensity or frequency that component will not be helpful. To the extent that a process component is near optimum for most clients, outcome will be roughly constant *insofar as it depends on that component,* and the correlation with outcome will be near zero. That is, no outcome variance will be explained by failure to provide enough of the process component. Put another way, appropriate responsiveness does not merely add error variance to the linear relations of client, therapist, and process variables with outcome; it specifically attenuates or defeats those statistical relations.

Next, in the case of *responsiveness to:* If the therapist is appropriately responsive to a client variable (e.g., demographics, personality), then there would be no advantage to the client in being different. The association of outcome with the client variable will be attenuated to the extent that the treatment is appropriately responsive to that variable. Conversely, then, to the extent that the

treatment is appropriately responsive, the importance of client characteristics or process components cannot be judged by their correlations with outcomes (Stiles, 1988, 1994, 1996; Stiles & Shapiro, 1989, 1994; cf. Hayes, Castonguay, & Goldfried, 1996; Sechrest, 1994; Silberschatz, 1994).

To illustrate, the degree to which a cognitive therapist focuses on a depressed client's negative self-image (a process component) may be crucially important, but client requirements for this focus vary, and if most clients receive enough, then the degree of this focus will not correlate with outcome. The level of focus may vary across clients, but if that variation is responsive to clients' varying requirements, then it will not significantly predict improvement unless, by coincidence, client requirements happen to predict outcome (for a discussion of this example, see Hayes et al., 1996; Stiles, 1996).

Similarly, if men and women have different requirements, and therapists respond appropriately, then men and women may have similar outcomes as a result of getting systematically different components of the treatment. It would be very misleading to suggest that this failure to predict outcome implies that gender is unimportant in the therapy. On the contrary, gender-related issues may be central to session content and powerfully influential in the way participants feel and act toward each other.

As another example, clients' expectations of treatment seem important clinically, but they have not been consistent predictors of outcome (Gaston, Gallagher, Marmar, & Thompson, 1989). If therapists respond appropriately, clients coming to dynamic treatment with behavioral expectations, for example, will be treated differently than those coming with dynamic expectations. Competent therapists will address the expectations when clients voice them, in an effort to overcome any differential impediment posed by mistaken or negative ideas. To the extent they are successful, expectations will not predict outcome.

More generally, plausible configurations of client requirements and therapeutic responsiveness may lead to positive, null, or even negative correlations of outcome with background and process variables, regardless of their degree of importance in therapy. To illustrate, if self-image were particularly refractory to treatment, then clients with the most negative self-images might have the worst outcomes, despite the efforts of their therapists. In such a case, clients who received the greatest focus on negative self-image (because therapists appropriately did as much as they could) might have poorer outcomes than those who received the least (because they didn't need it), yielding a negative correlation of this focus with outcome, even though this focus was an important and beneficial component of the treatment.

Experimental studies do not escape the responsiveness critique insofar as manipulating one process component may be compensated by responsive adjustments in others. For example, an interviewer told to decrease question-asking may compensate by using more silence, giving clients more space to talk. Cox, Holbrook, and Rutter (1981; Cox, Rutter, & Holbrook, 1981) manipulated interviewer style in diagnostic interviews with mothers of referred children. Interviewers using four contrasting styles (directive vs. non-directive crossed with active vs. passive) elicited very similar levels of information and feeling, but by different paths, as the interviewers and the mothers responsively adjusted to the experimental manipulations.

We are not arguing that previously observed process-outcome relations were necessarily spurious or should be disregarded. Reliable linear relations between process and outcome usually have interesting explanations, though the reasons may have nothing to do with any causal effect of the process on the outcome. Our point is not that responsiveness will always defeat or reverse linear relations of client variables and process components with outcomes, but rather that it may do so. This possibility implies that null statistical associations do not impugn the therapeutic importance of those client variables and process components. We are thus arguing for a more critical appraisal of both positive and null results in this domain, along with a search for alternative research approaches.

When More Is Better

More may be better when a process component is in short supply or when therapists fail to respond differentially to a relevant characteristic of the client or context (Stiles, 1996). Process components may be in short supply because of a lack of resources (e.g., not enough time or skill to do what is required), for example, or because of ignorance (e.g., cognitive therapists underestimating the importance of real relationships; Hayes et al., 1996). In such cases, however, the presence and size of a positive process-outcome correlation reflect the presence and size of the shortfall, not the importance of the component or

the characteristic. More may also be better when the process component in question is itself an evaluative index, such as strength of the therapeutic alliance, therapist competence, or session impact (Stiles, 1994, 1996); as we discuss later, such indexes appear to incorporate judgments of appropriate responsiveness.

Orlinsky et al.'s. (1994) comprehensive review reported several consistent process-outcome links. The strongest links involved the therapeutic bond or alliance (see discussion below), and several of the others similarly involved evaluative process indexes, such as session impact (therapeutic realizations) and therapist skill, or aspects that seem intuitively desirable, such as client openness/self-relatedness. The relatively few links involving technique categories (therapeutic operations) that were not explicitly evaluative, including paradoxical intention, experiential confrontation, and interpretation, are more controversial (see Shapiro et al., 1994, for a detailed critique). Even within the same edited volume, there were seemingly contradictory conclusions, for example, "in short, transference interpretations do not seem uniquely effective, may pose greater process risks, and may be countertherapeutic under certain conditions" (Henry, Strupp, Schacht, & Gaston, 1994, p. 479; see also Stiles & Shapiro, 1994).

Responsiveness as a Resolution of the Equivalence Paradox

The equivalence paradox (Stiles, Shapiro, & Elliott, 1986) is the observation that the outcomes of varied psychotherapies appear more-or-less equivalently positive even though their treatment techniques are very different (Lambert & Bergin, 1994; Lipsey & Wilson, 1993; Luborsky, Singer, & Luborsky, 1975; Seligman, 1995). The evidence is often summarized as the Dodo verdict: "*Everybody* has won, and *all* must have prizes" (Carroll, 1865/1946, p. 28; italics in original). The Dodo verdict may be an overstatement (Beutler, 1991; Norcross, 1995); there are exceptions (e.g., *in vivo* exposure for phobias and other anxiety disorders has consistently been found more effective than other behavioral procedures; Emmelkamp, 1994); and ultimately no two psychological procedures have exactly equivalent effects (i.e., the null hypothesis is never really true; Meehl, 1978). Nevertheless, the substantial degree of outcome equivalence relative to the technical diversity of treatments has long puzzled observers (Rosenzweig, 1936; Stiles et al., 1986).

The concept of responsiveness offers a possible resolution to the equivalence paradox: Treatments may tend to be equivalently effective because therapists respond appropriately to client requirements within each theoretical framework. That is, many different therapies may be successfully adapted to many different clients and problems by responsive application of their concepts and techniques.

The equivalent outcomes appear most paradoxical when clients are randomly assigned to treatment conditions, perhaps because it is tacitly assumed that the treatments were applied ballistically—as if each psychotherapy were a fixed sequence of therapeutic interventions. Random assignment represents nonresponsiveness at the level of treatment choice. If each treatment is understood as responsive at other levels, however, there is no paradox. Therapists and clients can compensate for treatment assignment by responsively using different portions of each treatment's repertoire, as required.

Even manualized therapies encourage responsiveness. Therapy manuals were developed in conjunction with comparative clinical trials to promote treatment purity—to specify the contents of psychotherapies in more detail than was conveyed by therapists' stated allegiance (Luborsky & DeRubeis, 1984). The manuals do not recommend a ballistic approach, however, but demand skill and clinical judgment about when and how to apply the specified techniques. They recommended close attention to the way clients respond to interventions and to the developing context of the therapy, and they suggest different tactics based on clients' emerging requirements (e.g., Beck, Rush, Shaw, & Emery, 1979; Greenberg et al., 1993; Klerman, Weissman, Rounsaville, & Chevron, 1984). For example, the last three of Beck et al.'s (1979) five considerations for "selection of targets and techniques" explicitly recommend responsiveness:

> *3. The therapist should attempt to gear his [sic] approach to the patient's level of sophistication, personal style, and typical coping techniques.*
>
> *4. The relative urgency and severity of the various problems and symptoms may dictate the priorities; that is, which problem(s) to deal with first.*
>
> *5. A certain amount of "trial and error" is usually necessary. The patient should be told: "We have a number of approaches that have been shown to be successful for various problems. We may have to try out several before we find the one that really fits you. Thus, if one method is not particularly helpful, it will provide us with valuable information regarding which method is likely to succeed." (p. 169)*

Nevertheless, in the short and medium term, introducing manuals risks interfering with therapists' responsiveness. Therapists following an imposed protocol may try to implement interventions described in the manual without attending to the client's current condition or requirements, thus impairing their effectiveness, at least until they have mastered the new approach (Anderson & Strupp, 1996; Binder, 1993; Henry, Strupp, Butler, Schacht, & Binder, 1993; Hoffart, 1997).

Therapists in skillfully conducted manualized treatments do appear to deliver process components responsively, depending on client characteristics. Hardy, Stiles, Barkham, and Startup (1998) found that therapists' reported intentions and observed behaviors in sessions differed systematically depending on the client's interpersonal style. In manualized cognitive-behavioral and psychodynamic-interpersonal therapies for depression, therapists tended to use more affective and relationship-oriented interventions with clients who had an overinvolved interpersonal style, particularly in the psychodynamic-interpersonal therapy, whereas, in the cognitive-behavioral therapy, therapists tended to use more cognitive and behavioral interventions with clients who had an underinvolved interpersonal style. Despite—or perhaps, we suggest, because of—receiving different mixes of interventions, clients with these different interpersonal styles had approximately equivalent outcomes in both treatments.

Importantly, nothing in the responsiveness concept precludes finding one technique superior to others or finding significant ATIs. The responsiveness concept is instead a way of reconciling the observed equivalence of outcomes with the enormous technical diversity of the psychotherapies.

REPEATED REDISCOVERY OF RESPONSIVENESS

Investigators seem endlessly puzzled at the lack of statistical associations of theoretically crucial client, therapist, and process variables with outcomes. For example, Crits-Christoph, Cooper, and Luborsky (1988) remarked that "the lack of a significant interaction between accuracy of interpretations and the quality of the therapeutic alliance was surprising given the clinical lore that a strong alliance is necessary for patients to tolerate and make use of interpretations" (p. 494).

Confronted with such puzzling results in particular studies, investigators have often turned to post hoc explanations that relied on responsiveness. For example, Piper, Debbane, Bienvenu, DeCarufel, and Garant (1986) hypothesized that, theoretically, interpretations focused on persons who were significant in the patient's life should be clinically important—especially interpretations linking the parents and the therapist. Across a large number of measures, however, most of the associations of interpretations focusing on such people with outcome were nonsignificant; the number of significant findings were within chance expectations; and many of the nominally significant findings were counterintuitive correlations with patient deterioration. In hindsight, Piper et al.'s. (1986) cited therapist responsiveness to differing patient requirements:

> *[T]he percentage of object interpretations masks divergent clinical processes. A low percentage may represent an absence of work . . . [or] a patient who works better with interpretations that focus on dynamic components rather than objects. A high proportion may represent the presence of considerable work; or it may represent a resistant patient who requires a repetition of interpretations about a particular area. (p. 10)*

Hill, Siegelman, Gronsky, Sturniolo, and Fretz (1981) explained their failure to find expected positive correlations between nonverbal therapist behaviors (e.g., smiles and nods) and favorable outcome by invoking the concept of critical timing (an aspect of responsiveness): "It may not be the frequency of occurrence of nonverbal behavior but an occurrence at a specific moment that is important" (p. 208). Many other process researchers have made similar comments regarding the limitations of linear approaches and the explanatory value of responsiveness (e.g., Hill et al., 1988; Jones et al., 1993; Kiesler, 1982; McCullough et al., 1991; Strupp, 1988).

ACCOMMODATING RESPONSIVENESS IN PSYCHOTHERAPY RESEARCH

To accommodate responsiveness, psychotherapy research should (a) include both therapist and client variables and acknowledge therapist-client interaction, (b) consider sequences or patterns of events rather than isolated events, (c) incorporate context, and (d) recognize that not all events are equally important (e.g., that there may be critical incidents or significant events). In this section, we discuss three alternative approaches that acknowledge these desiderata and take responsiveness into account: (1) via evaluative measures, which, we suggest, incorporate judgments of responsiveness; (2) via analysis of dynamic systems, which directly addresses the potentially nonlinear or

even chaotic relations among variables used responsively; and (3) via qualitative and narrative analyses, which dissect the process of responding in the context of individual cases.

Evaluative Judgments Incorporate Appropriate Responsiveness

Evaluative judgments—deciding whether something was good or bad, right or wrong, valuable or worthless—require expert or intuitive knowledge and integration. Descriptively equivalent events in treatment (e.g., therapist utterances coded as interpretations) are not reliably equivalent in value. We suggest that evaluative judgments of psychotherapeutic processes incorporate judgments of appropriate responsiveness. Their value depends on whether they were used appropriately (i.e., responsively in context, consistent with treatment principles and client requirements). Insofar as appropriate responsiveness calls for different behaviors in different contexts—and depends on treatment goals and theoretical orientation—there may be no strong or consistent relations between descriptions and evaluations. Any particular intervention could be evaluated positively if it was appropriate under prevailing circumstances and negatively if it was not. In psychotherapy research, evaluations are involved in assessing such phenomena as the therapeutic alliance, therapist competence, or the impact of a session.

Evaluative judgments often depend on empathic or experiential processes—understanding the client's thoughts and feelings, for example, or reporting one's own internal reactions. Such evaluative judgments may not reflect dimensions of behavior as much as the integrated reactions of the judge. The determinants of evaluative reactions may be unavailable to specification or introspection (Zajonc, 1980).

Although evaluative judgments of psychotherapeutic processes may be made reliably by experts who share an orientation, experts may systematically disagree across orientations (Messer, 1991). Even within an orientation, it is frustratingly difficult to say precisely how to construct a good relationship or a good session or a good intervention (cf. Pirsig, 1974).

Client-Therapist Alliance. We suggest that alliance judgments involve evaluating the fit of action to context and of participants to each other. That is, the alliance is not a therapeutic technique but instead reflects the responsive use of techniques. The alliance is considered to be composed of interrelated dimensions, including the therapeutic bond, confidence, agreement on tasks and goals, and patient working capacity (Gaston, 1990; Horvath & Luborsky, 1993). Each alliance dimension may be affected by many behaviors, and judges must select which aspects of the ongoing stream of behaviors are most relevant and assess their value via experiential integration (self-report versions) or empathic estimates (rater versions). As Marziali (1984) put it,

> *The treatment relationship is an ever shifting, at times elusive and ambivalent encounter. The task of the treatment partners may be that of continually restoring a positive balance so that a working bond can be maintained. (p. 421)*

In contrast to most descriptive process measures (e.g., use of particular techniques), measures of the alliance do show consistent positive links with psychotherapy outcome (Horvath & Symonds, 1991; Orlinsky et al., 1994). We suggest that these links reflect the incorporation of appropriate responsiveness.

Therapist Skill and Competence. Similarly, there is evidence that therapists differ substantially in their effectiveness (Crits-Christoph & Mintz, 1991; Lambert, 1989). Jones, Cumming, and Horowitz (1988), for example, found that therapist differences accounted for significant variance when client and process variables did not. A responsiveness account suggests that some therapists may be better than others not because they use some key technique more frequently but because they respond more appropriately to clients' differing and changing requirements. Waltz, Addis, Koerner, and Jacobson (1993) distinguished adherence—whether the therapist used the prescribed techniques and avoided the proscribed techniques—from competence—whether the techniques were used skillfully. Competence is sometimes, but not always, associated with adherence (Butler, Henry, & Strupp, 1995; Waltz et al., 1993). A wooden, unresponsive implementation of a treatment may be technically adherent. Competence additionally demands that actions be based on sensitivity to relevant aspects of the therapeutic context (Gurman, 1973; Hoffart, 1997; Schaffer, 1983; Strupp, 1988); that is, competence demands appropriate responsiveness.

Competence in different therapies may involve responsiveness *to* different cues as well as *with* different

techniques (Hoffart, 1997). For example, psychodynamic and experiential therapies may demand greater sensitivity to symbolic references, parapraxes, nuances of expression, and affect than do cognitive and behavior therapies. Cognitive and behavioral therapies also demand responsiveness, however, as illustrated in the passage from Beck et al.'s (1979) cognitive therapy manual, quoted earlier. Finding that the therapeutic alliance is as strong and as predictive of therapy outcome in cognitive therapies and even in pharmacotherapies as in psychodynamic treatments (Krupnick et al., 1996; Raue & Goldfried, 1994) indirectly suggests that responsive processes are important across approaches.

Critique of Evaluative Measures. Although evaluative measures may incorporate responsiveness, they are global indicators, and they may hide the process rather than revealing it. For example, a high score on a measure of therapeutic alliance may indicate that the therapist and client were appropriately responsive, but it says little about how the positive effects were actually attained. From this perspective, the correlations of alliance with treatment outcome (Horvath & Symonds, 1991; Orlinsky et al., 1994) are highly plausible but too global to be fully informative.

Evaluative measures may be best considered as a first step in unpacking responsive processes. For example, knowing that the alliance predicts the outcome allows one to ask, "What processes contribute to the alliance?"—perhaps a more tractable question than "What processes contribute to long-term outcome?" Considering placement on evaluative dimensions as intermediate manifestations sidesteps the puzzle of whether they represent cause or effect. As others have noted, strong therapeutic alliances or therapists' liking for their clients may be early indexes of positive outcome (DeRubeis & Feeley, 1990; Martin, Sterne, & Karwisch, 1976). Similarly, a therapist's competence may appear greater with a client who is improving for other reasons. Considering both evaluative process measures (alliance, competence) and outcome as manifestations of responsive dynamic processes directs attention to still lower levels of description and analysis.

Feedback, Dynamic Systems, and Chaos

Responsiveness implies feedback, as the effects of one action influence subsequent actions. Participants in therapy affect each other and thereby recursively affect their own behavior—on time scales from months to milliseconds simultaneously, as noted earlier. Thus, conversation in general and psychotherapy in particular can be studied as a dynamic system (Barton, 1994; Heiby, 1995a, 1995b; Newtson, 1994).

Elements of dynamic systems were acknowledged when psychotherapy researchers examined the interplay between therapist interventions and client Experiencing (Hill et al., 1988; Silberschatz & Curtis, 1993; Silberschatz et al., 1986). In the same vein, McCullough et al. (1991) reported that, although none of several investigated therapist interventions' overall incidence correlated significantly with outcome, therapist interpretations followed by patient affect correlated positively, whereas an intervention of any type followed by defensiveness correlated negatively.

Cybernetic Systems. In cybernetic systems, negative feedback maintains important variables within a limited range; for example, a home thermostat maintains temperature by operating a furnace or air conditioner in response to deviations from a set point. Psychological studies may seldom reveal anything so tidy as thermostatically controlled temperature, but cybernetic principles may be observed in limited ways. Hypothetically, a psychodynamic therapist might provide more interpretations until the client becomes defensive. In response to the defensiveness, the therapist might refrain from using interpretations. Giving fewer interpretations might lead the client to feel more supported and open, to which the therapist might respond by resuming the interpretations. In a laboratory study, drawing on a model of conversational activity based on paired oscillators, Warner (1992a) found a cyclical component in a time series analysis of conversational turn-taking. In 40-min getting-acquainted conversations, the regularity of the cycles increased significantly from the first 10 min to the last 10 min, suggesting that the organizing principles were neither linear nor random but involved a responsive process of mutual entrainment. Stronger cyclicity was positively correlated with participants' ratings of their positive affect (Warner, 1992b).

The cybernetic concept of self-maintaining states was used to account for patterns called *verbal exchanges* found in psychotherapy (Stiles & Shapiro, 1995). Speech act categories, such as disclosures, questions, interpretations, and acknowledgments, were found to co-occur in clusters, which were given names such as revealing, storytelling,

inquiring, and explaining. Each exchange involved participation by both client and therapist. For example, in the revealing exchange, the client used self-disclosures while the therapist used acknowledgments. Each type of verbal exchange could be considered as a distinct mutually responsive state of the dyad that was self-maintaining for brief periods, as speech acts by one party elicited complementary speech acts by the other.

Cybernetic systems notions have long been incorporated into therapy theory, particularly in family therapy (e.g., Boscolo, Cecchin, Hoffman, & Penn, 1987; Haley, 1973, Minuchin, 1984; Watzlawick, Weakland, & Fisch, 1974). These models differ in focus and detail, but all suggest that the system tends to maintain a degree of stability, that behavior of one member of the system is influenced by relationships with other members, and that changes at one point in the system lead to compensatory adjustments elsewhere in the system. It has been hard to translate these concepts into quantitative research, and they have been examined primarily using case histories. Minuchin (1984), for example, described the family system of an anorexic girl, Loretta, 16, whose mother allowed her daughters too little of the increasing self-determination that adolescents need to develop autonomy. Although it was offered in the guise of caring and caretaking, Loretta experienced this as stifling and had come to feel hopeless about gaining control over her own life. For other reasons, Loretta's father was also reluctant to challenge the mother's control. Suggesting that somatic problems may represent a covert means of expression for families who cannot tolerate open expression of discord, Minuchin supervised increasing levels of open dissent by Loretta and recast Loretta's not eating as a sign of dependence and infantilization. This allowed the family system to assume a new equilibrium. Instead of taking care of Loretta more intensely, they allowed her more of a voice. By the third month of the 4-month treatment, Loretta had gained 21 pounds, and at 18-month follow-up, she had a job, had reenrolled in high school, had many friends, and had a stormy relationship with her parents.

Chaotic Systems. Feedback does not always maintain stability and can make psychotherapeutic processes sensitively dependent on initial conditions. Minor fluctuations (say, the phrasing of an intervention) can initiate a cascade of events that lead in unexpected directions. The unpredictability undermines attempts to model the relationship between process and outcome in linear terms (Barton, 1994; Gleick, 1987). Even in very simple chaotic functions, there may be discontinuities—wide variations in the output values of adjacent input values (Heiby, 1995a, 1995b). That is, systems involving responsiveness may maintain equilibrium under some conditions but change unpredictably under other conditions. For example, a client's response to a therapist's confrontative intervention might stay relatively constant over a wide range of situations but show an abrupt transition when a particular level of anger is reached.

Many researchers agree that nonlinear methods hold promise for understanding interpersonal behavior, although efforts have been restricted to indexes that lend themselves to repeated measurement (e.g., Buder, 1991; Newtson, 1994; Redington & Reidbord, 1992; Warner, 1992a, 1992b). In a simulation model of conversational involvement, Buder (1991) used a simple nonlinear equation that assumed (1) speakers have a preferred involvement level in a conversation, (2) speakers try to avoid very high or very low levels of involvement, and (3) speakers try to minimize the difference between their participation level and their partners'. Some parameter values produced simulated conversational turn-taking patterns that would have been considered random based on conventional statistical techniques, even though they were technically chaotic. Buder concluded that some apparently random social behaviors may in fact be determined by simple nonlinear dynamic relationships. In an empirical application of chaos theory, Burlingame, Fuhriman, and Barnum (1995; Fuhriman & Burlingame, 1994) analyzed a time series in which therapeutic quality was coded for every verbal utterance in every session of a 30-hr time-limited group therapy (nearly 14,500 codes). They estimated the fractal dimension (an index of ordered complexity) and found that this varied across individual sessions and was associated with each session's mean therapeutic quality.

Realistically, nonlinear time series analysis may require too many data points to address more than a limited range of questions in psychotherapy research. On the other hand, clinical phenomena can be understood as manifestations of chaotic processes even when the underlying recursive variables are not measured directly as a time series. Schneider, Barwinski, and Fäh (1995), for example, used the chaos-related concept of the Bθnard phenomenon, in which shallow water on a heated surface suddenly forms convection cells when the heat reaches a critical

temperature. That is, a stable, undifferentiated system suddenly organizes itself, dramatically changing state in response to a tiny change in input. Schneider et al. (1995) suggested that this was structurally similar to the sudden insight and life reorganization in a psychoanalytic treatment: The client's gradually increasing dissatisfaction with treatment reached a threshold that led the analyst suddenly to view her own increasing feelings of helplessness (inability to resolve the client's dissatisfaction) as parallel with aspects of the client's life. This new self-understanding, framed as an interpretation, broke the client's distressing stagnation in treatment (the old equilibrium), leading the client to report feeling freer and newly able to look objectively and calmly at her situation.

Qualitative and Narrative Approaches to Studying Responsive Processes

Narrative Can Represent Responsiveness. By telling the story of a particular therapeutic relationship, session, or event, one can see how it was constructed in a particular case. Narratives can consider sequences of events rather than isolated events, incorporate context, and highlight important events. Responsive use of information in therapy—for example, what one actually does with information about a client's diagnosis, personality, or demographics, or about the validity and correlates of diagnostic, personality, or demographic characteristics—can often be described precisely only at the level of particular cases.

Stories about therapy are not mere chronicles of events, but have an internal structure or coherence (Robinson & Hawpe, 1986; White, 1980). In narrative accounts, events are made important not just by their magnitude or by their temporal sequence, but by the way in which they "play" relative to the meaning emerging in the context up to that point. Polkinghorne (1988) called this "schematic knowing," which "contains the notion of a whole or theme that pulls together and configures the bits of information into a systemic relationship," as contrasted with "serial knowing," which "ends with a list or chronicle of events without any relationship to a theme or unifying notion" (p. 111).

Narrative Is Scientifically Credible. Empirical scientific research is not necessarily numerical (Stiles, 1993; Toukmanian & Rennie, 1992). Case histories and accounts of critical events, for example, have long been central to the exposition of psychotherapeutic theory and clinical practice (e.g., Freud, 1905/1963, 1911/1958; Watson & Rayner, 1920). Narrative descriptions of events represent the exposure of theoretical and clinical understandings to the results of observation. The understandings may be changed and improved as a result (Polkinghorne, 1988; Robinson & Hawpe, 1986; Stiles, 1993, 1995b).

Science is often said to proceed by falsifying theories; however, theories are usually rescued from negative instances by attributing failed predictions to unmet ancillary assumptions—confounding contextual variables, insensitive measures, unrepresentative samples, and so forth (Meehl, 1990). Stories may provide a more convincing disconfirmation than controlled experiments by including more ancillary information. For example, Wallerstein's (1986) studies of cases in the Menninger Psychotherapy Research Project strongly challenged such psychoanalytic tenets as the superiority of interpretive over supportive therapeutic strategies.

Stories are often criticized for offering only weak support to declarative generalizations, as bundled in the pejorative phrase "anecdotal evidence." The responsiveness critique does not overcome these epistemological weaknesses, but by foregrounding the sometimes unacknowledged importance of context and reducing the promise of more general linear solutions to some problems in psychotherapy research, it may make narrative approaches *relatively* more attractive.

Research Using Narrative. In addition to traditional case studies, psychotherapy researchers have developed a variety of specific approaches that use the strengths of narrative. For example, research using task analysis (Rice & Saperia, 1984), assimilation analysis (Stiles, Meshot, Anderson, & Sloan, 1992), and comprehensive process analysis (Elliott, 1989) illustrates how questions involving psychotherapy process and outcome can be addressed in ways that accommodate context and responsiveness.

Task analysis consists of fine-grained descriptive work on collections of tape-recorded events representing a common feature or problem (Rice & Saperia, 1984). For example, Joyce, Duncan, and Piper (1995) constructed a model of how a client works with an interpretation and contrasted events in which clients did or did not work with an interpretation. An illustrative conclusion was that "the development of a work response appeared to hinge on two operations: the patient's Invitation to Interpret, and the therapist's interpretation itself. Nonwork episodes

were often characterized by an unclear, indirect, or absent patient Invitation to Interpret. The subsequent interpretation was then invariably experienced as premature, even if regarded as accurate by the judges" (p. 59). That is, responsiveness to the client's state of readiness appeared more important in determining impact than did the accuracy of the interpretation.

Assimilation analysis (Honos-Webb, Stiles, Greenberg, & Goldman, in press; Stiles, Meshot et al., 1992) tracks clients' progress within problematic themes across treatment. Problematic experiences are considered to pass through a sequence of stages as they become assimilated—from warded off through problem formulation and understanding to problem solution and mastery. Passages dealing with particular themes are collected from transcripts of whole treatments, placed in a temporal sequence, and used to assess and elaborate the model. For example, Lisa, who came to treatment for depression, experienced great anguish over her strong sense of responsibility for her husband's compulsive gambling coupled with her actual inability to control it. From an observer's perspective, the central therapeutic task initially appeared to be relinquishing this sense of responsibility and overcoming her co-dependency. An assimilation analysis showed, however, that Lisa found a way to retain her sense of responsibility and assimilate her husband's problematic behavior by refocusing on her responsibility for her own behavior. In her new understanding, she was responsible for her own emotional state through her active decision to remain in the marriage. Despite the lack of change in her husband's behavior and her unhappiness about it, her self-report and standard assessment measures showed dramatic improvement in her depressive symptoms, which was maintained at follow-up; thus, therapeutic change and alleviation of symptoms may not require change in objective circumstances (Honos-Webb et al., in press).

In Comprehensive Process Analysis (Elliott, 1989; Elliott et al., 1994), researchers construct "pathways" in which contributing factors and impacts are related to a particular target event. Patterns that are repeated across events of a particular type are identified. For example, in a study of awareness events (Elliott, 1989), clients seemed to need to avoid painful awareness at times. The pathway suggested that such avoidance may even be a precursor to later successful work with the problematic material. Knowledge of this possibility allows the therapist to respond appropriately to the avoidance by not immediately forcing attention immediately back to the painful topic. The narrative knowledge that proceeds from such findings is not rigidly prescriptive, but allows the therapist to be responsive to avoidance when it arises.

SUMMARY AND IMPLICATIONS

Implications for Psychotherapy Research

The ubiquity of responsiveness on all time scales—assigning clients to treatments, formulating treatment strategies, using and timing of treatment techniques, midcourse corrections during interventions, and so forth—makes some traditional approaches to research on how therapy works untrustworthy. Responsiveness specifically defeats attempts to find linear relations of process or background variables with treatment outcomes (e.g., process-outcome correlations) and offers alternative explanations for positive, negative, and (perhaps most importantly) null empirical results. By reinterpreting previous null findings, for example, responsiveness partially vindicates the clinical impression that interventions such as interpretations, self-disclosures, and focus on self-image or client characteristics such as gender, age, and ethnicity are important. Full vindication, demonstrating the importance empirically, however, requires alternative approaches.

Studying responsiveness at particular levels is a first step. For example, ATIs suggest responsiveness at the treatment assignment level; contingencies of therapist and client in-session behaviors represent responsiveness at the treatment tactics level. The multiplicity of influences and the likelihood that participants respond to each other on time scales as short as a few tens of milliseconds, however, may undermine attempts to describe responsive processes as a series of conditional, if-then statements.

Evaluative indexes of the process, such as measures of therapist competence or the client-therapist alliance, incorporate responsiveness and offer steps toward unpacking the responsive process. Researchers can proceed to ask what constitutes competence or a strong alliance (not expecting linear answers here either). Quantitative research using cybernetic or nonlinear systems principles holds promise that is unfulfilled so far because of the difficulty of identifying and measuring the many variables on the time scales that responsiveness takes place. Narratives about cases and sessions are an old approach to saying how therapy worked in particular instances. The results of narrative research are inevitably restricted and tentative,

acknowledging the epistemological limitations of anecdotes, but they are also potentially rich and accessible to practitioners, building a bridge between science and practice.

Implications for Practice

Responsiveness offers practitioners a way to understand how research results can be incorporated into clinical practice. In this understanding, research does not direct the clinician ballistically, but it reveals phenomena that deserve attention and offers options that may be invoked in appropriate circumstances. New information is integrated with—not merely added to—a practitioner's developing understanding.

As an illustration, Sue and Zane (1987) described the responsive use of information about ethnicity in therapy as a bridge between knowledge of culture and effective treatment. They noted that recommendations "to be culturally sensitive and to know the culture of the client . . . often fail to specify treatment procedures and to consider within-group heterogeneity," while "specific techniques based on the presumed cultural values of a client are often applied regardless of their appropriateness" (p. 37). In contrast, responsiveness requires context-sensitive nonballistic use of cultural knowledge. The knowledge informs clinical action without specifying it, alerting the therapist to cultural traditions and mores, to nonverbal behaviors that may have different meanings in different cultures (e.g., refusing to look directly at the therapist connotes inattentiveness or dishonesty in some cultural groups but respect for legitimate authority in others), and so forth, and suggesting alternative strategies. To be effective with ethnic groups, Sue and Zane (1987) suggested, a therapist must achieve credibility and demonstrate giving to the client. Of course, sensitivity, credibility, and giving are important regardless of the client's ethnicity. Responsiveness honors the special needs of the ethnic group member without expecting a ballistic answer to the question, "What are the needs of the ethnic client?" and without degenerating the question to "What are the needs of the client in general?"

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